

ABSTRACT OF THE DISCLOSURE

A semiconductor capacitor device has two pairs of first and second MIM capacitors on a semiconductor substrate. The
5 paired first and second MIM capacitors include respective capacitor dielectric films having different compositions. Also, the paired first and second MIM capacitors are connected in inverse parallel fashion, with an upper electrode of the first MIM capacitor being connected with a
10 lower electrode of the second MIM capacitor and with a lower electrode of the first MIM capacitor being connected with an upper electrode of the second MIM capacitor. Furthermore, the two first MIM capacitors are electrically connected in inverse parallel with each other, and the two
15 second MIM capacitors are also electrically connected in inverse parallel with each other. This arrangement facilitates mutual counteraction of the voltage dependences of the two pairs of first and second MIM capacitors so as to make the voltage dependence of the capacitance of the
20 capacitor device small.